Digital Literacy: Lesson Plan on Workplace Safety

Unit Overview

Instructor/Program: Adult Basic Education Outreach Program

Course/Setting: Blended Learning Model—Workplace English as a Second Language

NRS Level(s): High Beginning to Low Intermediate English as a Second Language (ESL), NRS ESL Levels 3–4 **Unit Theme:** Workplace Safety

Length of Unit: Two 90-minute lessons are given within a 2-week period.

Content Area:	Main Standards Addressed:
☐ Civics education ☑ Digital literacy ☑ Workforce preparation ☐ Health literacy ☐ Financial literacy **NOTES on Content Area:** Digital literacy instruction can include some direct instruction on skills but also must be integrated into highly relevant content learning. Essentially, there should not be a "unit" on digital literacy exclusively.	**CCR A-B:** R7: Use visual information. W6: Use digital tools to create content and collaborate with others. W8: Recall information from digital sources. SL5, Level C: Include multimedia displays in presentations. **ELPS 2-3:** ELPS 5: Gather information from digital sources, including graphics. **Additional Standards**: Northstar Digital Literacy Assessment Standards for Essential Computer Skills: Northstar Digital Literacy Assessment is available at no cost. ISTE Student Standards: Empowered Learner and Creative Communicator

Rationale for This Unit *(Why is this unit important to my students?)*:

English language learners new to the workplace in the United States may not have the necessary support in their work environment to understand posted safety signs. Instructions provided in this unit will help them be safe at work. The lessons have rich technology integrated into them that supports digital literacy development.

Unit Objective(s) *(What will my students be able to do at the end of this unit?)*:

• Identify potentially unsafe work behaviors

• Recognize the meaning of safety signs posted at work

• Communicate about potentially hazardous situations

• Create and format a document in Google Docs, choose a font color, and add media

• Conduct a web search for specific information

Lines of Inquiry (LOI) *(What essential question(s) form the thread that holds this unit together?)*:

How do we communicate about safety at work?

Central Skills of Focus in This Unit *(Check the skills that are emphasized in this unit)*:

☑ Critical thinking

☑ Communication

☑ Processing and analyzing information

☑ Self-awareness

☐ Navigating systems

☑ Adaptability and willingness to learn

☐ Respecting differences and diversity

☐ Interpersonal skills

NOTES on Central Skills (Items underlined are explicitly taught and/or practiced):

Critical Thinking: *Consider work hazards and ways to prevent injuries*

Communication: *Talk about lack of safety in photos the teacher shows, talk about work safety signs, practice vocabulary with safety sign chart, work at learning stations on safety sign document, share creation in Google Docs with classmates orally, work in teams and pairs throughout unit*

Processing and Analyzing Information: *Construct meaning from images in Safety Sign Worksheet*

Problem Solving: *Troubleshoot while working with Google searches and Google Docs, address technology issues throughout unit*

Respecting Differences and Diversity: *Talk about how such signs differ in home countries, work in differentiated groups based on comfort with technology throughout unit*

Self-Awareness: *Reflect on tasks at the end of each lesson*

Common student misconceptions/misunderstandings that may interfere with learning:

• Some students in the class may not realize that employers are required to communicate about workplace safety, so they may not be aware that safety signs are visible at work.

• Some students may not see digital technology as a relevant resource for learning about workplace safety.

Lesson Planning Template

Standard(s)	ELA/Mathematics/ELP:	
Indicate which standards from the unit are targeted in this specific lesson.	**CCR A–B:** R7: Use of visual information. W6: Use digital tools to create content and collaborate with others. W8: Recall information from digital sources. SL5, level C: Include multimedia displays in presentations. **ELPS Levels 2–3:** ELPS 5: Gather information from digital sources, including graphics. **Additional Standards**: Northstar Digital Literacy Assessment Standards for Essential Computer Skills: Northstar Digital Literacy Assessment is available at no cost. ISTE Student Standards: Empowered Learner and Creative Communicator	
Lesson as Part of the Unit	Where does this lesson fall within the unit? ☑ beginning ☐ middle ☐ end	
Instructional Objective(s) and Learning Target Statements *The former are written in teacher language derived primarily from content standards and include evidence of mastery. The latter are written in student-friendly language and help learners reflect on what they are able to do as a result of the lesson.*	**Instructional Objective:** By the end of this lesson, the students will be able to: • Describe potentially unsafe behavior at work. • Read and understand the meaning of posted safety signs. • Do an internet search for images. • Create and share a document in Google Docs. • Use simple formatting skills in Google Docs.	**Learning Target Statements (for learners' exit tickets, learning logs, or reflection)** *I can tell someone how to be safe at work.* *I can tell someone what different safety signs mean.* *I can use Google Docs.*

Assessing Mastery of the Objective(s) *Indicate when and how assessment—formative and/or summative—will occur during the lesson.*	**Proof of Learning:** ☑ Via observation of a team task (e.g., discussion, work on project) ☐ Via team self-assessment ☐ Via individual self-assessment ☑ Via team product ☐ Via individual product ☐ Other_____ **Proof-of-Learning Tools:** ☐ Rubric ☑ Checklist ☐ Quiz ☑ Other <u>Completing Worksheet</u>	**Ongoing Formative Assessment** ☐ Nonverbal responses to comprehension questions (e.g., answer cards, Kahoot) ☐ Peer-to-peer quizzing (e.g., Quiz Quiz Trade) ☑ Exit/admit tickets ☐ KWL charts ☐ Other_____
Language Demands *Include academic language and any language that may affect a student's ability to access the content in directions, examples, tasks, etc.*	**Academic Language Functions:** • Describing • Classifying • Vocabulary related to workplace safety and signage as co-constructed by students and teacher • Giving and receiving directions using imperative sentences	
Adaptations and/or Accommodations *How will EVERY student have access to the content of the lesson? Identify differentiation strategies and consider misconceptions from the unit plan.*	This lesson shows how blended learning offers the opportunity for differentiation. In this class, the teacher uses station rotation, placing the students around the room at different activity stations based on their demonstrated need early in the lesson. The Computer Skills Checklist (Appendix A) can be used to help with placement.	**MATERIALS** • Computer Skills Checklist (Appendix A)

Introduction *How will you introduce the lesson objective and how it fits into the unit/LOI? Identify its relevance to learners' needs and goals.* **Time: 15 minutes**	**Teacher:** *Workplace safety is a serious issue. If you get injured, you might not be able to work for a while. Let's look for a few examples where someone didn't think about workplace safety.* The teacher models opening a Chromebook and logging in to Google, narrating the steps as they are projected. The teacher opens a web browser and types in "unsafe work behavior." The teacher elicits observations from the students about unsafe behavior exhibited in the pictures, extends the discussion to ways to prevent injury, and lists prevention behaviors as imperatives on the whiteboard or on Post-its. (This list should remain visible as a resource for the entire class and be kept for possible use later in the unit.) **Central Skills:** Critical Thinking, Communication	• Teacher Chromebook computer (or some other device connected to the internet) • Projector • Screen • Whiteboard or large white Post-its
Explanation and Modeling *What type of direct instruction do learners need? Are there ways for learners to access the new content independently? What types of models will you provide and when?* **Time: 15 minutes**	**Teacher:** *One way to stay safe is to follow safety signs at work. Let's look at a few safety signs.* The teacher does a web search for "safety sign," making the screen visible using the projector and again narrating the steps. The teacher asks the students which signs they recognize and what they mean and then asks what the students notice about the color and shape of each sign. The teacher, through questioning, helps the students arrive at the following conclusions: Red—prohibition or fire Blue—mandatory safety action Yellow or orange—warning Green—safe condition Show this image from Quora (https://www.quora.com/What-are-the-different-shapes-and-colors-used-for-safety-signs-How-can-I-understand-their-meanings):	• Teacher Chromebook computer (or some other device connected to the internet) • Projector • Screen • Whiteboard or large white Post-its

Shape	Meaning	Color	Examples
Circle with diagonal bar	Prohibition	RED (contrast: white)	No smoking
Circle	Mandatory Action	BLUE (contrast: white)	Wear Eye protection
Equilateral Triangle	Warning	YELLOW (contrast: black)	Danger Flammable material
Square / Rectangle	Information about safe condition	GREEN (contrast: white)	Escape Route – Left
Square / Rectangle	Fire Safety	RED (contrast: white)	Fire Extinguisher

The teacher explains key vocabulary listed in the "Meaning" column and any unknown words in the provided examples. The teacher also explains examples elicited from the learners, listing key vocabulary on the whiteboard or on Post-its.

The teacher then has the students talk in pairs about where they have seen these signs and discuss whether or not the signs are the same in their countries.

Central Skills: Communication, Processing and Analyzing Information, Respecting Differences and Diversity

Guided Practice	**Teacher:** *Now let's see what you recall. Use this worksheet. Match the sign to its meaning.*	• Safety Sign Worksheet (Appendix B)
Which tasks and learning activities will you use to engage learners with the content and skills? How will you structure the tasks or other learning activities to support learners' success?	Activity 1: The teacher passes out the "Safety Sign" worksheet, which requires matching the correct meaning to each sign. The students complete the worksheet individually at first. The teacher circulates and answers questions or pairs students who are struggling.	• Chromebook for each student
	Teacher: *Now let's find a few more signs that will help you stay safe. Get your Chromebook, log in, and open a web browser. Do a web search on safety signs. Look for five signs that you know will help keep you safe at work or in school.*	• Paper
Time: 30 minutes		• Colored pencils or markers
	Activity 2: The students get into groups of two or three, open their Chromebooks, and each logs in to Google and begins the internet search. If there are not enough computers, some student pairs can jointly use one computer, with only one student logging in.	
	The teacher can demonstrate this process one more time on the projected screen. If the students are having trouble finding five signs, the teacher can show them this website: https://en.wikipedia.org/wiki/ISO_7010.	
	The teacher has one student open a document in Google Docs and name it "Safety Signs." This student shares the document with the other students.	
	Teacher: *Go back to your web search results and copy your five pictures into your document in Google Docs. Name the signs. In each case, change the font color to match the sign color.*	
	If some students are really struggling with Google Docs, the teacher can ask them to take out a piece of paper and draw the signs, then label them.	
	The teacher circulates, providing assistance and noting proficiency with the content and with using the computer.	
	The teacher has a few students talk about what they created, showing their document or paper to the rest of the students.	
	Central Skills: Problem Solving, Communication, Processing and Analyzing Information	

Application/Extended Practice *What will learners do to demonstrate their acquisition of content knowledge, basic skills, and key soft skills?* **Time: 25 minutes**	**Station Rotation:** Place the students at different stations depending on what was observed in previous activities. **Station 1:** This station is reserved for students who struggled the most with the content and have low-level computer skills. The teacher will rehash previous activities and work with this small group by reviewing sign meaning or computer skills, including vocabulary for the computer skills employed in the internet search and in creating and formatting the document in Google Docs. **Station 2:** This station, devoted to self-directed computer skills development, is reserved for students who felt comfortable with the tasks. The teacher asks them to make use of learning resources in GCFLearnFree.org in the area of Google Docs. Then they can continue to develop their "Safety Signs" document. **Station 3:** This station, devoted to self-directed ESL study, is reserved for students who demonstrated adequate proficiency in the previous tasks and who choose to use the time for more direct language instruction in USA Learns. (These students are already oriented to and have worked independently in USA Learns, so they presumably can be self-directed.) **Central Skills:** Problem Solving, Communication, Student Reflection on Learning Targets	• Chromebooks • https://www.gcflearnfree.org • https://www.usalearns.org/
Student Reflection on Learning Targets, Closure, and Connection to Future Learning **Time: 5 minutes**	The teacher brings the students back together as a group and asks them to turn to a partner and share: • What was difficult today? • What was easy? **Exit Ticket:** **Teacher:** *What are three things you learned in today's class. E-mail them to me.* **Option for Extended Learning:** The students can complete a lesson in USALearns. They can also look around for more safety signs and add one to their document. Students who cannot add the sign to the document themselves can take a picture or make a drawing of the sign and bring it to the next class. **Central Skill:** Self-Awareness	• Chromebooks • E-mail accounts.

Appendix A. Computer Skills Checklist

Use this template to create a tech-skill focus checklist each week. Monitor student proficiency and progress using the checklist.

Week _____

Technology Skills	Students Who Need More Help	Notes
Review: Turning on Chromebook		
Review: Logging in to account		
Review: Using standard mouse functions (right click, left click, double click, scrolling)		
Review: Basic keyboarding skills • Arrows • Letters • Numbers • Backspace		
Opening drive		
Creating and sharing a document in Google Docs • Naming documents appropriately • Sharing with classmates		
Formatting a document in Google Docs • Change color • Copy and paste an image from a website		

Appendix B. Safety Sign Worksheet

Match the picture with the general meaning. Write the letter next to the correct meaning. Write the specific meaning if you can.

Prohibition _____ _____   Mandatory safety action _____ _____

Fire _____ _____   Warning _____ _____ _____   Safe condition _____ _____ _____

A. _____   B. _____   C. _____   D. _____   E. _____   F. _____

_____   _____   _____   _____   _____   _____

G. _____   H. _____   I. _____   J. _____   K. _____   L. _____

_____   _____   _____   _____   _____   _____